RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: _10/597,034_
Source: _STFWO_
Date Processed by STIC: _7/12/06_

ENTERED

RAW SEQUENCE LISTING   DATE: 07/12/2006
PATENT APPLICATION: US/10/597,034   TIME: 09:33:14

Input Set : A:\034205.003.ST25.txt
Output Set: N:\CRF4\07122006\J597034.raw

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       3 <110> APPLICANT: Ottawa Health Research Institute
       5 <120> TITLE OF INVENTION: Diabetogenic Epitopes
       7 <130> FILE REFERENCE: 034205.003
C-->   9 <140> CURRENT APPLICATION NUMBER: US/10/597,034
C-->   9 <141> CURRENT FILING DATE: 2006-07-07
       9 <150> PRIOR APPLICATION NUMBER: PCT/CA05/00025
      10 <151> PRIOR FILING DATE: 2005-01-10
      12 <150> PRIOR APPLICATION NUMBER: US 60/535,278
      13 <151> PRIOR FILING DATE: 2004-01-09
      15 <160> NUMBER OF SEQ ID NOS: 52
      17 <170> SOFTWARE: PatentIn version 3.3
      19 <210> SEQ ID NO: 1
      20 <211> LENGTH: 10
      21 <212> TYPE: PRT
      22 <213> ORGANISM: Artificial
      24 <220> FEATURE:
      25 <223> OTHER INFORMATION: Diabetogenic epitope from gliadin protein isoforms or Glb1
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      26        on wheat protein
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      35 <211> LENGTH: 9
      36 <212> TYPE: PRT
      37 <213> ORGANISM: Unknown
      39 <220> FEATURE:
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      45 1               5
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      49 <211> LENGTH: 2018
      50 <212> TYPE: DNA
      51 <213> ORGANISM: Unknown
      53 <220> FEATURE:
      54 <223> OTHER INFORMATION: Wheat gene
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      59 ttcgccgcgg ctgtttcggc ctcccatgac gaggaggagg acaggcgcgg tgggcgctcg       120
      61 cttcagcggt gcgtgcagcg gtgccagcag gaccggccgc ggtactctca tgcccggtgc       180
      63 gtgcaggagt gccgggacga ccagcagcag cacggaaggc acgagcagga ggagcagggc       240
      65 cgcgggcatg gccggcacgg cgaggggggag cgtgaggagg agcagggccg tggccgtggg       300
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73 gtgtccaggc tcctccgggg catcaggaac taccgtgtcg ccatcatgga ggtgaacccg  540
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77 gagggggtgc tgacggtgat cgagaacggc gagaagcggt cctacaccgt caggcaaggc  660
79 gatgtgatcg tggcgccggc ggggtccatc atgcacctgg ccaacaccga cggccggagg  720
81 aagctggtca tcgccaagat tctccacacc atctccgtcc ccggcaagtt ccagtatttc  780
83 tcggccaagc tctcctcgc tagtttgagc aaacgcgtgc tcacagcggc gttaaagacc  840
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87 tccatctcca tcgtccgcgc gtcagaggag cagctccgcg agctgcgtcg ccaggcgtcc  960
89 gagggtgacc agggccacca ctggcctctc cccccgttcc gcggcgactc gcgcgacacc  1020
91 ttcaacctcc tggagcagcg ccccaagatc gccaaccgcc atggccgcct ctacgaggcc  1080
93 gacgcccgta gcttccacgc cctcgcccaa cacgacgtcc gcgtcgccgt ggccaacatc  1140
95 acgccgggtt ctatgaccgc gccctacctg aacacccagt cgttcaagct cgccgtcgtg  1200
97 ctggaaggcg agggcgaggt ggagatcgtc tgcccgcacc tcggccgcga cagcgagcgc  1260
99 cgcgagcaag agcacggcaa gggcaggtgg aggagcgagg aagaggagga cgaccggcgg  1320
101 cagcaacgcc gacgcgggtc cggctccgag tcggaggagg agcaggacca gcagaggtac  1380
103 gagacggtcc gcgcgcgggt gtcgcgcggc tcggcgttcg tggtgccccc cggccacccg  1440
105 gtggtggaga tcgcctcgtc ccgcggcagc agcaacctcc aggtggtgtg cttcgagatc  1500
107 aacgccgaga ggaacgagcg ggtgtggctc gccgggagga acaacgtgat cgccaagctg  1560
109 gacgacccg cccaggagct cgccttcggc aggcccgcga gggaggtgca ggaggtgttc  1620
111 cgcgccaagg atcagcagga cgagggcttc gtcgccggac ccgagcagca gcaggagcat  1680
113 gagcgcgggg accgccgccg tggtgaccgc gggcgcggcg acgaagccgt ggaggcgttc  1740
115 ctgaggatgg caaccgccgc gctctgaggc ggcaaggccg ctgttgttaa gtgaatgtgt  1800
117 gagctggagc ccgtgccatt tgagagctga acttgtatgt gtgtgtaagt ttgtcagtac  1860
119 gcgggagtag cataaataag tcgtggcacg ggctcagtac gatgatgtaa gttgcgtacc  1920
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127 <211> LENGTH: 588
128 <212> TYPE: PRT
129 <213> ORGANISM: Unknown
131 <220> FEATURE:
132 <223> OTHER INFORMATION: WP5212 wheat protein sequence
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141             20                  25                  30
144 Glu Asp Arg Arg Gly Gly Arg Ser Leu Gln Arg Cys Val Gln Arg Cys
145         35                  40                  45
148 Gln Gln Asp Arg Pro Arg Tyr Ser His Ala Arg Cys Val Gln Glu Cys
149     50                  55                  60
152 Arg Asp Asp Gln Gln Gln His Gly Arg His Glu Gln Glu Glu Gln Gly
153 65                  70                  75                  80
156 Arg Gly His Gly Arg His Gly Glu Gly Glu Arg Glu Glu Glu Gln Gly
157             85                  90                  95
160 Arg Gly Arg Gly Arg Arg Gly Gln Gly Glu Arg Glu Glu Glu Gln Gly
161             100                 105                 110
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164 Arg Gly Arg Gly Arg Arg Gly Glu Gly Glu Arg Asp Glu Glu His Gly
165         115             120             125
168 Asp Gly Arg Arg Pro Tyr Val Phe Gly Pro Arg Ser Phe Arg Arg Ile
169         130             135             140
172 Ile Arg Ser Asp His Gly Phe Val Lys Ala Leu Arg Pro Phe Asp Glu
173 145             150             155             160
176 Val Ser Arg Leu Leu Arg Gly Ile Arg Asn Tyr Arg Val Ala Ile Met
177             165             170             175
180 Glu Val Asn Pro Arg Ala Phe Val Val Pro Gly Leu Thr Asp Ala Asp
181             180             185             190
184 Gly Val Gly Tyr Val Ala Gln Gly Glu Gly Val Leu Thr Val Ile Glu
185         195             200             205
188 Asn Gly Glu Lys Arg Ser Tyr Thr Val Arg Gln Gly Asp Val Ile Val
189         210             215             220
192 Ala Pro Ala Gly Ser Ile Met His Leu Ala Asn Thr Asp Gly Arg Arg
193 225             230             235             240
196 Lys Leu Val Ile Ala Lys Ile Leu His Thr Ile Ser Val Pro Gly Lys
197             245             250             255
200 Phe Gln Tyr Phe Ser Ala Lys Pro Leu Leu Ala Ser Leu Ser Lys Arg
201         260             265             270
204 Val Leu Thr Ala Ala Leu Lys Thr Ser Asp Glu Arg Leu Gly Ser Leu
205         275             280             285
208 Leu Gly Ser Arg Gln Gly Lys Glu Glu Glu Glu Lys Ser Ile Ser Ile
209     290             295             300
212 Val Arg Ala Ser Glu Glu Gln Leu Arg Glu Leu Arg Arg Gln Ala Ser
213 305             310             315             320
216 Glu Gly Asp Gln Gly His His Trp Pro Leu Pro Pro Phe Arg Gly Asp
217             325             330             335
220 Ser Arg Asp Thr Phe Asn Leu Leu Glu Gln Arg Pro Lys Ile Ala Asn
221             340             345             350
224 Arg His Gly Arg Leu Tyr Glu Ala Asp Ala Arg Ser Phe His Ala Leu
225         355             360             365
228 Ala Gln His Asp Val Arg Val Ala Val Ala Asn Ile Thr Pro Gly Ser
229     370             375             380
232 Met Thr Ala Pro Tyr Leu Asn Thr Gln Ser Phe Lys Leu Ala Val Val
233 385             390             395             400
236 Leu Glu Gly Glu Gly Glu Val Glu Ile Val Cys Pro His Leu Gly Arg
237             405             410             415
240 Asp Ser Glu Arg Arg Glu Gln Glu His Gly Lys Gly Arg Trp Arg Ser
241         420             425             430
244 Glu Glu Glu Glu Asp Asp Arg Arg Gln Gln Arg Arg Arg Gly Ser Gly
245         435             440             445
248 Ser Glu Ser Glu Glu Glu Gln Asp Gln Gln Arg Tyr Glu Thr Val Arg
249     450             455             460
252 Ala Arg Val Ser Arg Gly Ser Ala Phe Val Val Pro Pro Gly His Pro
253 465             470             475             480
256 Val Val Glu Ile Ala Ser Ser Arg Gly Ser Ser Asn Leu Gln Val Val
257             485             490             495
260 Cys Phe Glu Ile Asn Ala Glu Arg Asn Glu Arg Val Trp Leu Ala Gly
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261               500               505               510
264 Arg Asn Asn Val Ile Ala Lys Leu Asp Asp Pro Ala Gln Glu Leu Ala
265          515               520               525
268 Phe Gly Arg Pro Ala Arg Glu Val Gln Glu Val Phe Arg Ala Lys Asp
269       530               535               540
272 Gln Gln Asp Glu Gly Phe Val Ala Gly Pro Glu Gln Gln Gln Glu His
273 545               550               555               560
276 Glu Arg Gly Asp Arg Arg Arg Gly Asp Arg Gly Arg Gly Asp Glu Ala
277               565               570               575
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284 <210> SEQ ID NO: 5
285 <211> LENGTH: 291
286 <212> TYPE: PRT
287 <213> ORGANISM: Unknown
289 <220> FEATURE:
290 <223> OTHER INFORMATION: Alpha/beta-gliadin A-II precursor of wheat protein
292 <400> SEQUENCE: 5
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299          20                25                30
302 Pro Ser Gln Gln Gln Pro Gln Glu Gln Val Pro Leu Val Gln Glu Gln
303          35                40                45
306 Gln Phe Gln Gly Gln Gln Gln Pro Phe Pro Pro Gln Gln Pro Tyr Pro
307       50                55                60
310 Gln Pro Gln Pro Phe Pro Ser Gln Gln Pro Tyr Leu Gln Leu Gln Pro
311 65                70                75                80
314 Phe Pro Gln Pro Gln Leu Pro Tyr Pro Gln Pro Gln Pro Phe Arg Pro
315               85                90                95
318 Gln Gln Pro Tyr Pro Gln Pro Gln Pro Gln Tyr Ser Gln Pro Gln Gln
319          100               105               110
322 Pro Ile Ser Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln
323       115               120               125
326 Gln Gln Ile Leu Gln Gln Ile Leu Gln Gln Gln Leu Ile Pro Cys Arg
327    130               135               140
330 Asp Val Val Leu Gln Gln His Asn Ile Ala His Gly Ser Ser Gln Val
331 145               150               155               160
334 Leu Gln Glu Ser Thr Tyr Gln Leu Val Gln Gln Leu Cys Cys Gln Gln
335               165               170               175
338 Leu Trp Gln Ile Pro Glu Gln Ser Arg Cys Gln Ala Ile His Asn Val
339          180               185               190
342 Val His Ala Ile Ile Leu His Gln His His His His Gln Gln Gln
343          195               200               205
346 Gln Gln Gln Gln Gln Gln Gln Pro Leu Ser Gln Val Ser Phe Gln Gln
347    210               215               220
350 Pro Gln Gln Gln Tyr Pro Ser Gly Gln Gly Phe Phe Gln Pro Ser Gln
351 225               230               235               240
354 Gln Asn Pro Gln Ala Gln Gly Ser Phe Gln Pro Gln Gln Leu Pro Gln
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355                 245                 250                 255
358 Phe Glu Glu Ile Arg Asn Leu Ala Leu Gln Thr Leu Pro Ala Met Cys
359                 260                 265                 270
362 Asn Val Tyr Ile Pro Pro Tyr Cys Thr Ile Ala Pro Phe Gly Ile Phe
363         275                 280                 285
366 Gly Thr Asn
367     290
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371 <211> LENGTH: 307
372 <212> TYPE: PRT
373 <213> ORGANISM: Unknown
375 <220> FEATURE:
376 <223> OTHER INFORMATION: Alpha/beta-gliadin MM1 precursor of wheat protein
378 <400> SEQUENCE: 6
380 Met Lys Thr Phe Leu Ile Leu Ala Leu Leu Ala Ile Val Ala Thr Thr
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385                 20                  25                  30
388 Pro Ser Gln Gln Gln Pro Gln Glu Gln Val Pro Leu Val Gln Gln Gln
389         35                  40                  45
392 Gln Phe Pro Gly Gln Gln Gln Pro Phe Pro Pro Gln Gln Pro Tyr Pro
393     50                  55                  60
396 Gln Pro Gln Pro Phe Pro Ser Gln Gln Pro Tyr Leu Gln Leu Gln Pro
397 65                  70                  75                  80
400 Phe Pro Gln Pro Gln Leu Pro Tyr Pro Gln Pro Gln Leu Pro Tyr Pro
401                 85                  90                  95
404 Gln Pro Gln Leu Pro Tyr Pro Gln Pro Gln Pro Phe Arg Pro Gln Gln
405                 100                 105                 110
408 Pro Tyr Pro Gln Ser Gln Pro Gln Tyr Ser Gln Pro Gln Gln Pro Ile
409         115                 120                 125
412 Ser Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Lys Gln Gln
413     130                 135                 140
416 Gln Gln Gln Gln Gln Gln Ile Leu Gln Gln Ile Leu Gln Gln Gln Leu
417 145                 150                 155                 160
420 Ile Pro Cys Arg Asp Val Val Leu Gln Gln His Ser Ile Ala Tyr Gly
421                 165                 170                 175
424 Ser Ser Gln Val Leu Gln Gln Ser Thr Tyr Gln Leu Val Gln Gln Leu
425                 180                 185                 190
428 Cys Cys Gln Gln Leu Trp Gln Ile Pro Glu Gln Ser Arg Cys Gln Ala
429         195                 200                 205
432 Ile His Asn Val Val His Ala Ile Ile Leu His Gln Gln Gln Gln
433     210                 215                 220
436 Gln Gln Gln Gln Gln Gln Gln Pro Leu Ser Gln Val Ser Phe Gln Gln
437 225                 230                 235                 240
440 Pro Gln Gln Gln Tyr Pro Ser Gly Gln Gly Ser Phe Gln Pro Ser Gln
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444 Gln Asn Pro Gln Ala Gln Gly Ser Val Gln Pro Gln Gln Leu Pro Gln
445                 260                 265                 270
448 Phe Glu Glu Ile Arg Asn Leu Ala Leu Glu Thr Leu Pro Ala Met Cys
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<u>Invalid <213> Response:</u>
Use of "Artificial" only as "<213> Organism" response is incomplete,
per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:1,10,11,12,13

VERIFICATION SUMMARY   DATE: 07/12/2006
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L:9 M:270 C: Current Application Number differs, Replaced Current Application No
L:9 M:271 C: Current Filing Date differs, Replaced Current Filing Date